

## CURRICULUM VITAE - JENNIFER TIMM

### Current Work Address:

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### PREVIOUS EMPLOYMENT

JANUARY 2020 - NOW: RUTGERS UNIVERSITY

- Postdoc Associate working with Paul Falkowski, investigating the origins of catalysis and the potential for simple peptides to catalyze complex chemical reactions that could have kick-started metabolism and life on early earth.

JANUARY 2018 – JANUARY 2020: UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL

- Postdoc Associate working with Celia Schiffer, focusing on the investigation of drug resistance in HCV protease and the characteristics of pan-genotypic activity of certain inhibitors.

APRIL 2016 – JULY 2017: EUROPEAN MOLECULAR BIOLOGY LABORATORY (EMBL) GRENOBLE

- Postdoctoral Fellow working with Daniel Panne, investigating the structure of Chromatin Assembly Factor 1 (CAF1) and gaining further insight into its mechanism of histones H3-H4 deposition onto newly-synthesized DNA.

JANUARY-DECEMBER 2015: COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES (CEA) GRENOBLE

- Postdoctoral Researcher at the Laboratoire de Chimie et Biologie des Métaux (LCBM) working with Christine Cavazza, investigating accessory proteins in CO dehydrogenase (CODH) maturation and responsible for nickel insertion into CODH's active site.

OCTOBER-DECEMBER 2014 : UNIVERSITY OF YORK

- Technician position in temporary replacement of the lab manager with responsibilities in ordering, maintaining and fixing of lab equipment as well as support of the researchers in the lab.

### EDUCATION AND QUALIFICATIONS

OCTOBER 2010 – DECEMBER 2014: PHD AT UNIVERSITY OF YORK

- PhD in Chemistry, Graduation: January 2015
- PhD thesis title: Structure-function studies of kinetoplastid proteins.
- Supervisors: Prof. Keith S. Wilson and Prof. Tony Wilkinson
- Examiners: Prof. Jane Endicott and Prof. Gideon Grogan
- Laboratory exchange (September - October 2012 & May - June 2013) for parasitological work with Prof. Dolores González-Pacanowska at the Instituto de Parasitología y Biomedicina "López-Neyra" in Granada, Spain

OCTOBER 2005 – JULY 2008: BSc (PLUS EXTRACURRICULAR COURSES) AT UNIVERSITY OF KONSTANZ

- BSc in Biological Sciences
- Degree (grade 2.0) obtained July 2008
- Majors in membrane biophysics, X-ray crystallography, environmental toxicology, tropical ecology and molecular genetics.

- Bachelor thesis: Expression, purification and functional characterisation of the KdpFABC complex Supervisors: Prof. Wolfram Welte and Prof. Hans-Jürgen Apell

SEPTEMBER 2001 - JANUARY 2005: APPRENTICESHIP AS CHEMISTRY TECHNICIAN (STAATLICH GEPRUEFTE CHEMISCH-TECHNISCHE ASSISTENTIN)

- Dual Qualification: Abitur and apprenticeship as Chemistry Technician (Chemisch-Technische Assistentin)
- Institution: Staatliche Gewerbeschule für Chemie, Pharmazie und Agrarwirtschaft, Hamburg
- Degree obtained January 2005

SEPTEMBER 2000 - JUNE 2004: GYMNASIUM HEIDBERG, HAMBURG, GERMANY

- Abitur obtained June 2004, overall grade 2.4
- September 1996 - August 2000: Gymnasium Uhlenhorst-Barmbek, Hamburg, Germany

## WORK EXPERIENCES

JULY 2009 – SEPTEMBER 2010: CALIFORNIA INSTITUTE OF TECHNOLOGY

- Student assistant in the group of Prof. William Clemons, Dept. of Chemistry and Chemical Engineering
- Expression optimisation and purification of glycosyl transferases from *Campylobacter jejuni* for crystallisation

SEPTEMBER 2008 – APRIL 2009: UNIVERSITY OF KONSTANZ

- Student assistant (part time) in Structure Biology; Continuation of my project started for my bachelor thesis in the groups of Prof. Wolfram Welte and Prof. Hans-Jürgen Apell

MARCH – SEPTEMBER 2005 & AUGUST – SEPTEMBER 2006: QIAGEN DIAGNOSTICS

- Internship in R&D department for molecular diagnostics
- Development and validation of *rt*PCR-based rapid detection systems for pathogens and hereditary diseases

## LIST OF PUBLICATIONS (ORCID ID: ORCID.ORG/0000-0001-9750-3293)

- Molecular mechanism of HCV NS3/4A inhibition by glecaprevir and characterization of genotype-specific structural differences.  
**Timm J.**, Kosovrasti K., Henes M., Leidner F., Hou S., Ali A., Kurt-Yilmaz N., Schiffer C., (2020), *ACS Chem. Biol.*, doi: 10.1021/acscchembio.9b00675.
- The carbon monoxide dehydrogenase accessory protein CooJ is a histidine-rich multidomain dimer containing an unexpected Ni (II)-binding site.  
Alfano M., Perard J., Carpentier P., Basset C., Zambelli B., **Timm J.**, Crouzy S., Ciurli S. and Cavazza C. (2019), *J. Biol. Chem.*, doi:10.1074/jbc.RA119.008011.
- Structural characterization of acidic M17 leucine aminopeptidases from the TriTryps and evaluation of their role in nutrient starvation in *Trypanosoma brucei*.  
**Timm J.\***, Valente M.\*, García-Caballero D., Gonzalez-Pacanowska D. & Wilson K. S. (2017), *mSphere* doi: 10.1128/mSphere.00226-17.

- The CO Dehydrogenase accessory protein CooT is a novel Nickel-binding protein.  
**Timm J.**, Brochier-Armanet C., Perard J., Zambelli B., Ollagnier-de-Choudens S., Ciurli S., and Cavazza C. (2017), *Metallomics*, doi: 10.1039/C7MT00063D.
- Insights into the molecular architecture and histone H3-H4 deposition mechanism of yeast Chromatin assembly factor 1.  
Sauer P., **Timm J.**, Liu D., Sitbon D., Boeri Erba E., Velours C., Mücke N., Langowski J., Ochsenbein F., Almouzni G., Panne P. (2017), *Elife*, doi: 10.7554/eLife.23474.
- Cell cycle regulation and novel structural features of thymidine kinase, an essential enzyme in *Trypanosoma brucei*.  
Valente M.\*, **Timm J.\***, Castillo-Acosta V., Ruiz-Pérez L. M. Balzarini T., Nettleship J. E., Bird L. E., Rada H., Wilson K. S. & González-Pacanowska D. (2016), *Mol Microbiol.*, doi: 10.1111/mmi.13467.
- Structural and Kinetic Characterization of Thymidine Kinase from *Leishmania major*.  
**Timm J.\***, Bosch-Navarrete C.\*, Recio E., Nettleship J. E., Rada H., Gonzalez-Pacanowska D. & Wilson K. S. (2015), *PLoS Negl. Trop. Dis.*, doi:10.1371/journal.pntd.000378.
- Structures of adenosine kinase from *Trypanosoma brucei brucei*.  
**Timm J.**, Gonzalez-Pacanowska D. & Wilson K. S. (2014), *Acta Cryst F*, doi: 10.1107/S2053230X13033621.
- Tying down the arm in *Bacillus* dUTPase: structure and mechanism.  
García-Nafría J., **Timm J.**, Harrison C., Turkenburg J. P. & Wilson K. S. (2013). *Acta Cryst D*, doi: 10.1107/S090744491300735X.

## LIST OF PDB ENTRIES:

dUTPase (*B.subtilis*): 4B0H

Adenosine Kinase (*Trypanosoma brucei*): 4N08, 4N09

Thymidine Kinases (*T. brucei*, *Leishmania major*): 4UXH, 4UXI, 4UXJ, 5FUY, 5FUX, 5FUW, 5FUV

Leucyl Aminopeptidases (*T. brucei*, *T. cruzi*, *L. major*): 5NSK, 5NSM, 5NSQ, 5NTD, 5NTF, 5NTG, 5NTH

CooT (*Rhodospirillum rubrum*): 5N76

HCV proteases: 6P6L, 6P6M, 6P6O, 6P6Q, 6P6R, 6P6S, 6P6T, 6P6V, 6P6Z, 6VDL, 6VDM, 6VDN, 6VDO